

Environmental and Cultural Resource Considerations

Social and Economic: Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs federal agencies to appropriately analyze environmental impacts to minority and low-income populations. The intent is to ensure those environmental impacts due to federal activities and federally funded activities do not disproportionately affect minority and low-income populations. State agencies in South Carolina such as the Department of Transportation incorporate Environmental Justice considerations in their analysis and planning efforts.

Based on blockgroup data from the U.S. Census, the 1990 estimated population of the study area is 56,081 (1990 is the most recent available blockgroup Census data) (U.S. Commerce Department 1990). The Environmental Justice guidance developed by the Council on Environmental Quality defines "minority" as individual(s) who are members of the following population groups: American Indian or Alaskan Native; Asian or Pacific Islander; African-American, not Hispanic origin; or Hispanic. The Council on Environmental Quality defines these groups as minority populations when the minority population of the affected area exceeds 50 percent of the population for that area (CEQ 1997). For the study area, DOT calculated the 1990 minority population, which is 98% African-American, as 17,385. Within the study area, seven Census blockgroups clustered in the central and northeast area of the City of Greenwood are

identified as having minority populations greater than 50 percent. Figure 5.1 illustrates this data.

To spatially identify low income populations in the Greenwood study area that could be more severely impacted by highway projects, DOT used U.S. Census Bureau 1990 Poverty Thresholds and Census blockgroup data (U.S. Commerce Department 1990). The average family size in Greenwood County is 3.1. Using Census Bureau Poverty Thresholds, DOT calculated the poverty level threshold for a family of 3.1 persons as \$10,713 annually. Using the Census blockgroup data, DOT identified two blockgroups in the study area with medium family income of \$10,713 or less in 1990. See Figure 5.2 for these locations.

Recreational and Scenic Resources:

Study area recreational facilities may be found on Figure 5.3. The Greenwood study area falls partially within the Sumter National Forest (Long Cane District) at approximately five miles southwest of the City of Greenwood. National forests are managed for timber and wood production, watershed protection and improvement, habitat for wildlife and fish species (including threatened and endangered ones), wilderness areas, minerals leasing, and outdoor recreation. Sumter National Forest was named in honor of Thomas Sumter, Revolutionary War hero who later served in the U.S. Congress. The forest, established in 1936, was the scene of many of Sumter's feats. The Long Cane District encompasses 199,077

acres, 10,951 of which are in Greenwood County (U.S. Forest Service 2000). Lake Greenwood is a major recreational facility in the region. Lake Greenwood State Park is at the lake about 18 miles east of the City of Greenwood. The park, said to be beautifully landscaped, was first developed by the Civilian Conservation Corps in the 1930s. It encompasses 914 acres (SC Department of Parks, Recreation and Tourism 1999) with five peninsulas that extend into the lake creating abundant shoreline for boating, camping, and picnicking.

Part of South Carolina's National Heritage Corridor flows through the Greenwood study area. The Corridor is a series of existing highways, roads, towns, cities and sights delineated to give visitors and residents a greater appreciation of South Carolina's history, culture, and natural beauty. Designated a National Heritage Area by the U.S. Congress in 1996, South Carolina's Heritage Corridor was the first nationally recognized heritage area in the United States. The corridor is made up of 14 counties and is divided into four regions with Greenwood in Region 2. Two separate routes flow through the corridor. The nature route denotes sights of natural significance. The discovery route holds historically significant sights. The discovery route runs through the Greenwood study area and is illustrated in Figure 5.3.

There are several existing and one proposed recreational facility in and around the City of Greenwood. Located downtown are Magnolia Park, the Greenwood Museum and the Greenwood Community Theatre. A recreational complex, including the Civic Center, is located northeast of downtown just

outside the city limits. The Greenwood Country Club is located to the west just outside the city limits. According to the Greenwood Planning Department, a park is proposed on the former site of the Greenwood Water Works in the northwest area of the City. All of these facilities are depicted on Figure 5.3.

There are several areas in Greenwood County of notable scenic/historical value. Among them are the Grendel Mill Village and Greenwood Mill Village in City of Greenwood and Riegel Mill Village in Ware Shoals. These charming old neighborhoods are some of the state's earliest residential subdivisions. Other neighborhoods of note are in Ninety Six and Cokesbury.

Multi-purpose trails have become a desirable recreational facility and there are several existing and planned in the study area. The Heritage Trail is a 2.5 mile paved former rail bed extending from downtown Greenwood south to Florida Avenue that accommodates cycling, jogging and walking. This trail is the first phase of a series of multi-purpose trails to be constructed in Greenwood County called the Greenwood Rails-into-Trails System (GRITS). Planned are a nine-mile stretch from Greenwood to Ninety-Six and a seven-mile stretch from Greenwood to Hodges. Other existing trails include Gray Street Greenway (0.25 miles), the Gouedy walking trail in Ninety-Six (1.5 miles), and a nature trail at Lake Greenwood State Park (0.8 miles) (SC Department of Parks Recreation and Tourism 2000).

Historic and Archaeological

Resources: The following listed properties on the National Register of

Historic Places are located in the Greenwood study area (SC Department of Archives and History 2000):

1. Old Cokesbury, Masonic Hall and Female College (Hodges District).
2. Stony Point Home near Hodges.
3. J. Wesley Brooks Home southeast of the City of Greenwood.
4. James C. Self House west of City of Greenwood.
5. Old Greenwood High School in City of Greenwood.
6. Sunnyside House in City of Greenwood.
7. Mt. Pisgah A.M.E. Church in City of Greenwood.
8. Vance-Maxwell House downtown Greenwood.
9. Lander College, Old Main Building downtown Greenwood.
10. Barratt House south of Greenwood.
11. Ninety Six Historic District.
12. Greenville Presbyterian Church, Shoals Junction.

The Ninety Six Historic District is particularly noteworthy. It encompasses a 989-acre American Revolutionary War park, the scene of Nathanael Greene's siege in 1781. The site contains a 1781 star-shaped earthen embankment and fortification, a reconstructed stockade fort, the remains of two historic villages, a colonial plantation complex, and numerous prehistoric sites. See Figure 5.4 for the locations.

In addition, seven properties in the study area have been determined to be **eligible** for the National Register of Historic Places (Greenwood City/County Planning 1999).

13. Ware Shoals Inn in Ware Shoals.

14. Katherine Hall in the Square at Ware Shoals.
15. Emma Maddox School and Big Bethel A.M.E. Church in Ware Shoals.
16. Old McCord Homeplace in Hodges.
17. William Judge Moore House in City of Greenwood.
18. Greenwood Cemetery/Old Methodist Cemetery in City of Greenwood.
19. Buzzard Roost Hydroelectric Project at the junction of Greenwood and Newberry Counties at Lake Greenwood.

Other properties of local and regional significance include a cotton gin in the Epworth Community, and the Railroad Historical Center in downtown Greenwood (Greenwood City/County Planning 1999).

Threatened and Endangered Species:

In South Carolina, certain terrestrial and aquatic species (animal and vegetative) are categorized according to their status with respect to being threatened or in danger of becoming extinct. The South Carolina Department of Natural Resources provides a legal status while The Nature Conservancy recognizes species according to degree of state endangerment. Four species of plants with endangerment designations have been observed in the study area. They are listed as follows along with their status (SC Department of Natural Resources 2000):

1. Columbo – species of regional concern
2. Oglethorpe's Oak – species of state concern
3. Three-Parted Violet – species of state concern

4. Small Skullcap - species of state concern.

consulted for specific wetland locations and classification.

“Of concern” means this species may be rare and possibly a candidate for the official threatened and endangered list. See Figure 5.5 for the locations where these species have been observed.

Hazardous and Solid Waste Sites and Facilities: There are five municipal solid waste landfills, five industrial solid waste landfills, nine CERCLA¹ sites, and two groundwater contaminated sites within the study area (SCDHEC 2000). See Figure 5.6 for their locations.

Hydrology and Wetlands: In a generalized way, Figure 5.7 indicates flood prone areas or areas subject to the 100-year flood. This information is derived from flood insurance rate maps obtained from the Federal Emergency Management Agency (FEMA 1987). Within the study area, several creeks and areas around Lake Greenwood are subject to flooding. As specific corridors are proposed for highway improvement and or construction, detailed hydrologic maps should be consulted for more specific flooding locations.

According to National Wetland Inventory (F&WS 2000), Greenwood County has 4,067 acres of wetlands², the majority of which are classified as Palustrine, i.e., wetlands dominated by trees and shrubs. As specific corridors are proposed for highway improvement and or construction, U.S. Geological Survey wetland delineation maps may be

¹ Comprehensive Emergency Response, Compensation, and Liability Act [42 U.S.C. s/s 9601 et.seq. (1980)].

² Greenwood County total acres = 296,288.

Council on Environmental Quality, 1994. Guidance on Environmental Justice, Federal Register, Vol.59 No. 32, February 16.

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S.C. Department of Archives and History, 2000. GIS data file of National Register of Historic Places properties.

S.C. Department of Health and Environmental Control, 2000. GIS data file of solid and hazardous waste sites across South Carolina.

S.C. Department of Natural Resources, 2000. GIS data file of Rare, Threatened and Endangered Species of South Carolina.

S.C. Department of Parks, Recreation and Tourism, 2000. South Carolina State Parks Guide, web site: www.southcarolinaparks.com.

S.C. Department of Parks, Recreation and Tourism, 2000. South Carolina Trails Inventory, web site: www.sctrails.com.

S.C. Heritage Trail web site: www.angelfire.com/sc/activegreenwood.

U.S. Department of Agriculture, 2000. National forests web site: www.fs.fed.us/r8/fms/welcome/tsumter.html.

U.S. Department of Commerce, 1990. Demographic data for South Carolina, 1990 Census of the Population, U.S. Census Bureau.

U.S. Department of Commerce, 1990. Percent Distribution of South Carolina Population by Race and Hispanic Origin by County, 1990 Census of the Population.

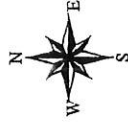
U.S. Department of Commerce, 1999. Current Population Survey, U.S. Census Bureau.

U.S. Department of Interior, Fish and Wildlife Service, 2000. National Wetland Inventory web site: ecos.fws.gov.

Figure 5.1

Greenwood Study Area

Minority Population by
Census Blockgroup



- Study Area Boundary
- City Boundaries
- Minority Population
 - less than 50%
 - greater than 50%



Produced by SCDOT Planning, March 2000
Data derived from U.S. Census

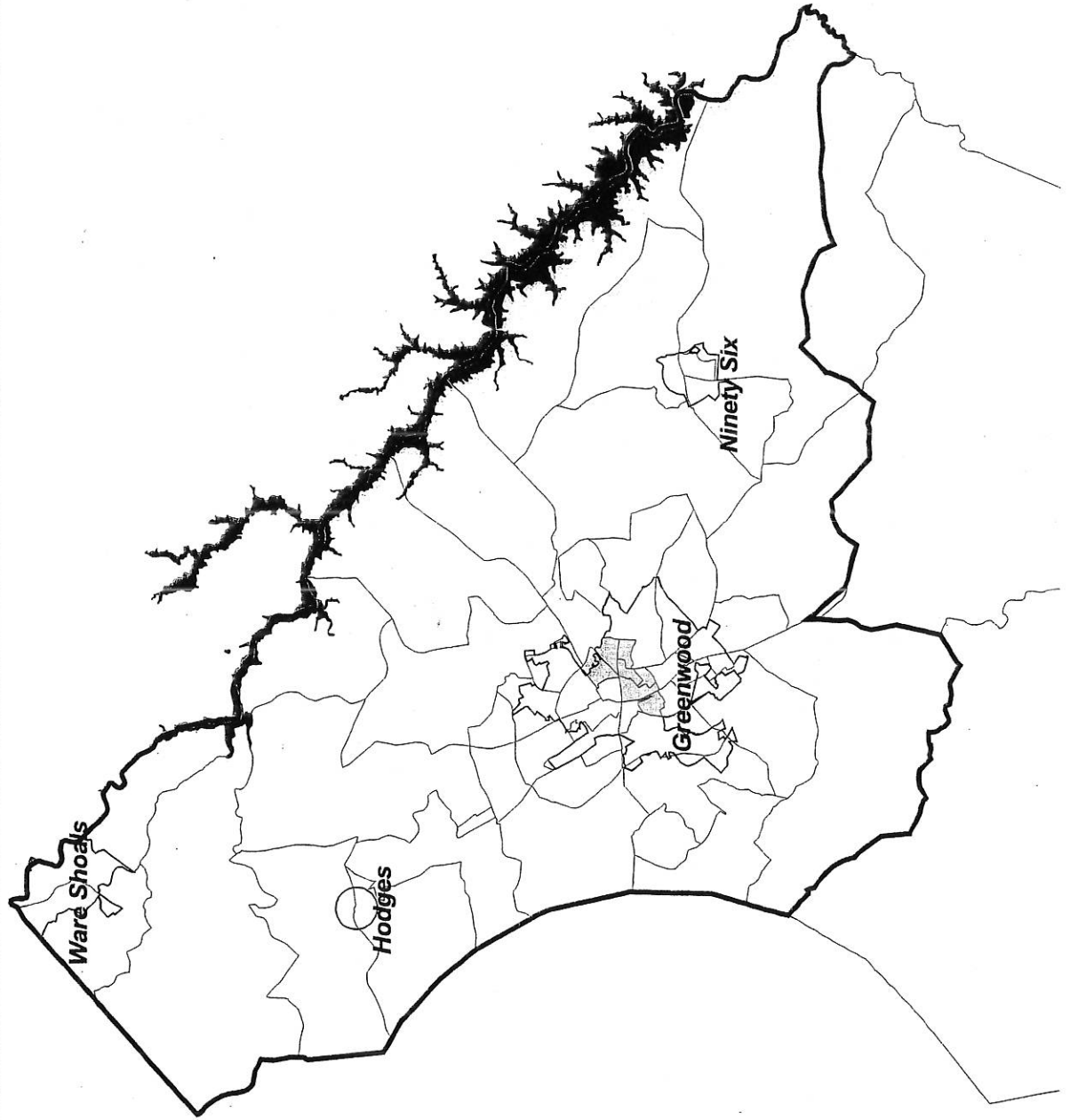
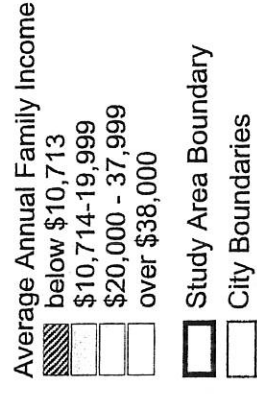
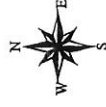


Figure 5.2
Greenwood Study Area
Income by
Census Blockgroups



Produced by SCDOT Planning, March 2000
Data derived from U.S. Census

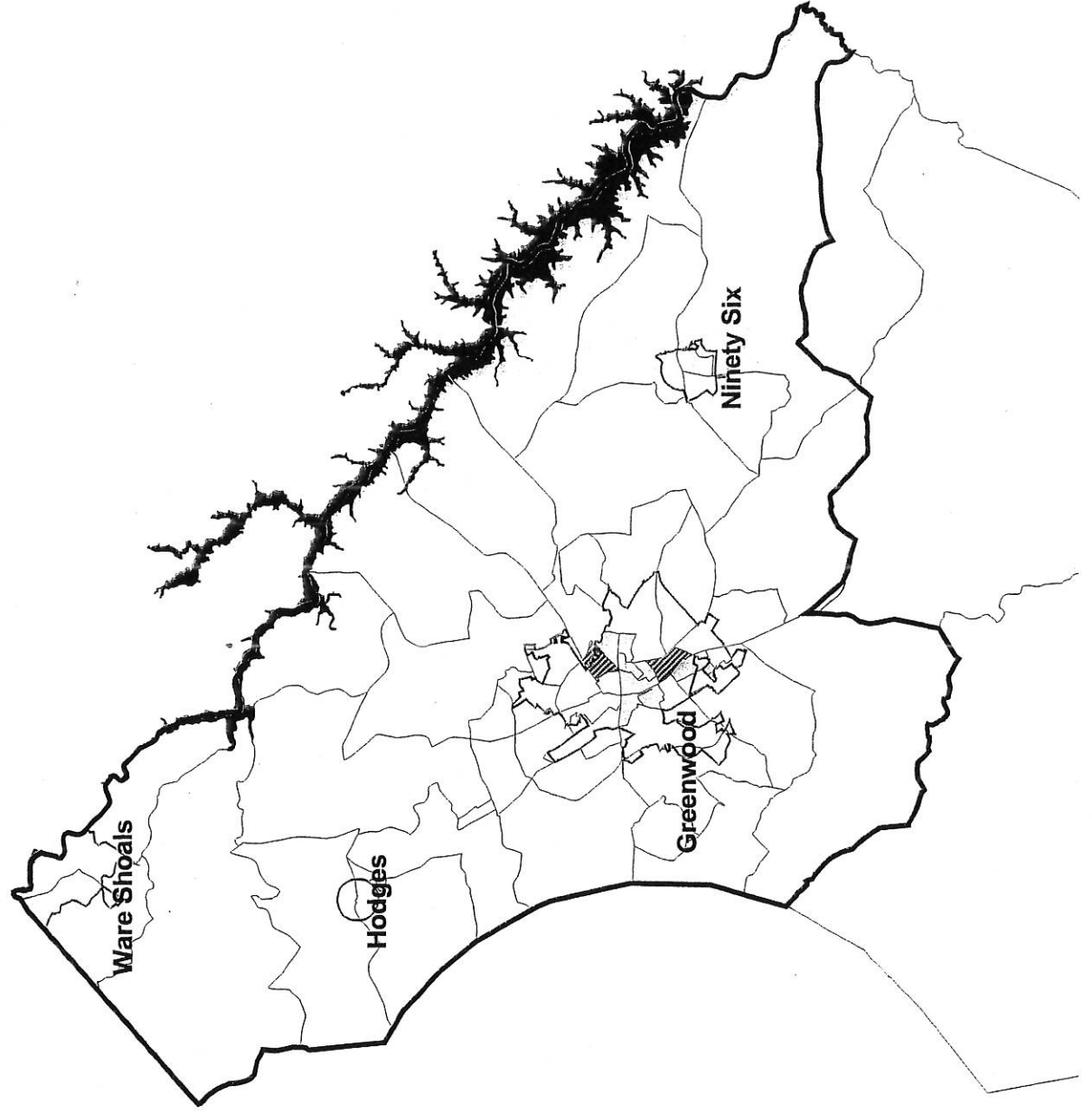
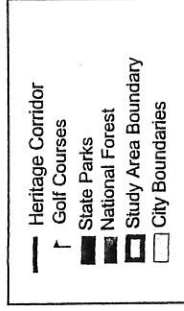
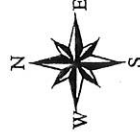
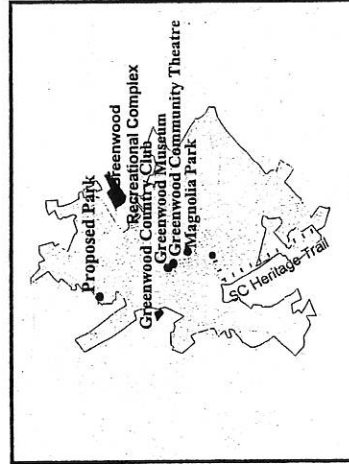
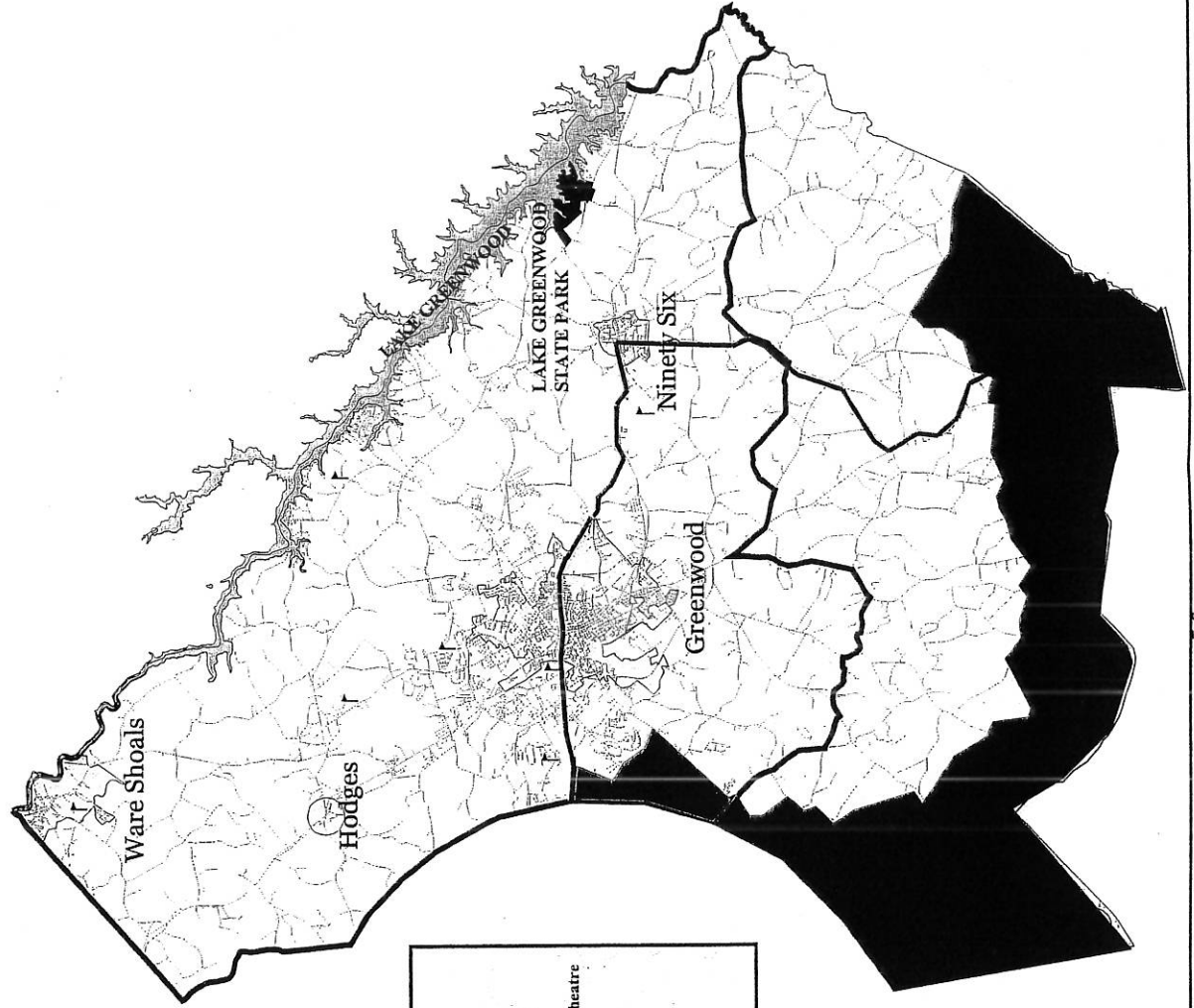


Figure 5.3
Greenwood Study Area
Parks and Recreation

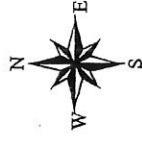


Data obtained from the
 SC Department of Natural Resources
 Produced by SCDOT Planning April 2000



Greenwood City Inset

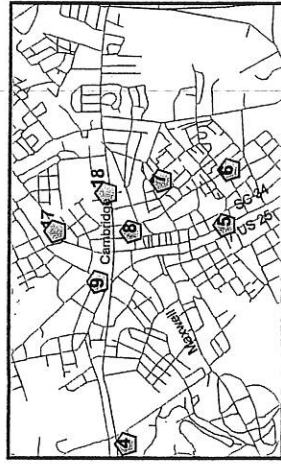
Figure 5.4
Greenwood Study Area
Historic Properties



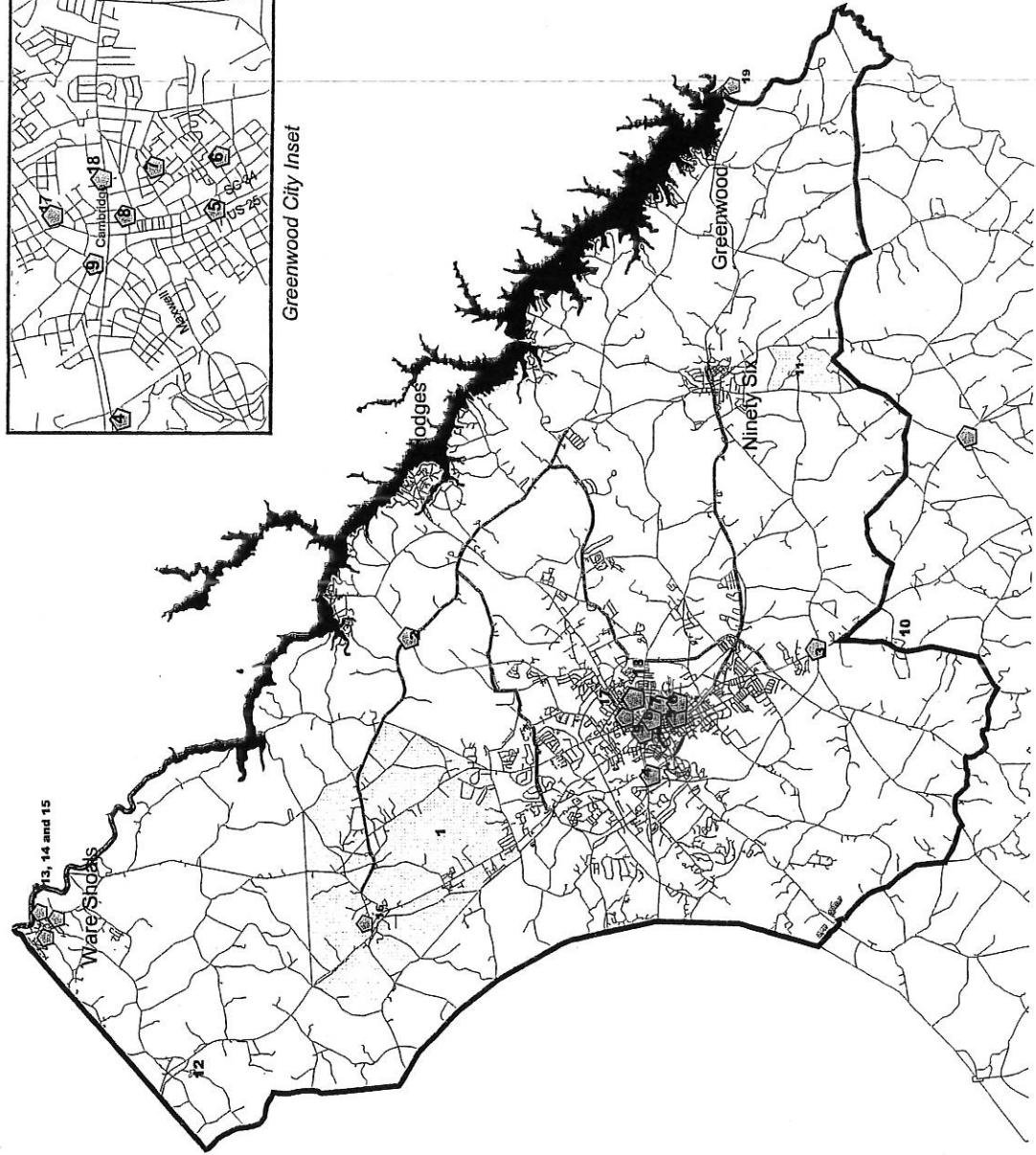
- National Register Sites
- National Register Eligible Properties
- National Register Districts
- Study Area Boundary



Data obtained from the
SC Department of Archives and History
Produced by SCDOT Planning April 2000



Greenwood City Inset



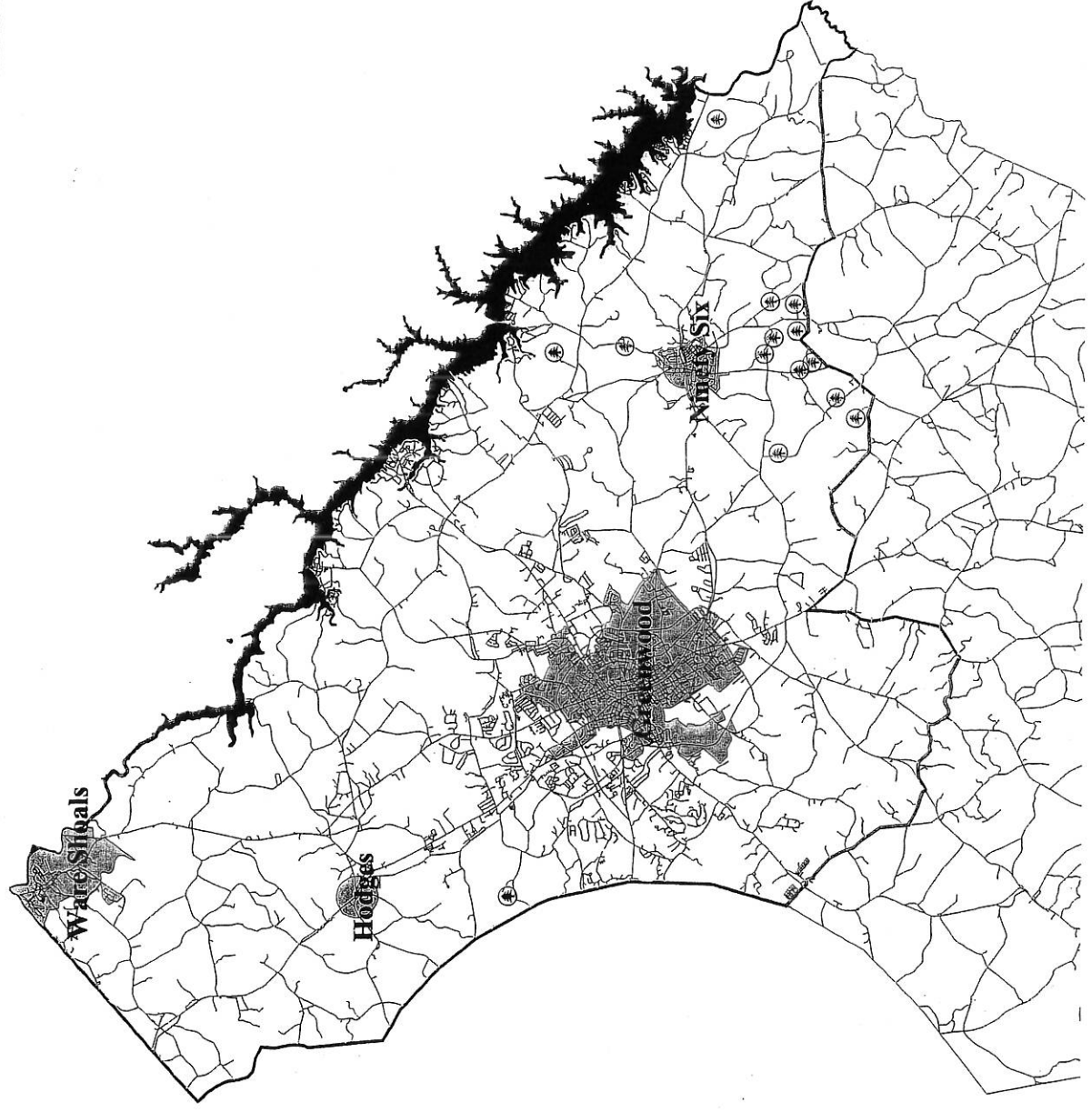
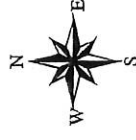


Figure 5.5

Greenwood Study Area

Species of State and Regional Concern



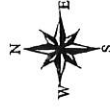
- Species by common name
- Columbo-regional concern
 - Oglethorpe's Oak-SC concern
 - Small Skullcap-SC concern
 - Three-parted Violet-SC concern
- City Boundaries
 Study Area Boundary



Data obtained from the
 SC Department of Natural Resources
 Produced by SCDOT Planning April 2000

Figure 5.6

Greenwood Study Area Waste Sites and Facilities



- Municipal Solid Waste Landfills
- Known Contaminated
- Groundwater Sites
- ⊙ Industrial Solid Waste Landfills
- ▲ CERCLA Sites
- City Boundaries
- Greenwood Study Area



Data obtained from the
South Carolina Department of Health and Environmental Control
Bureau of Land and Waste Management
March 31, 2000

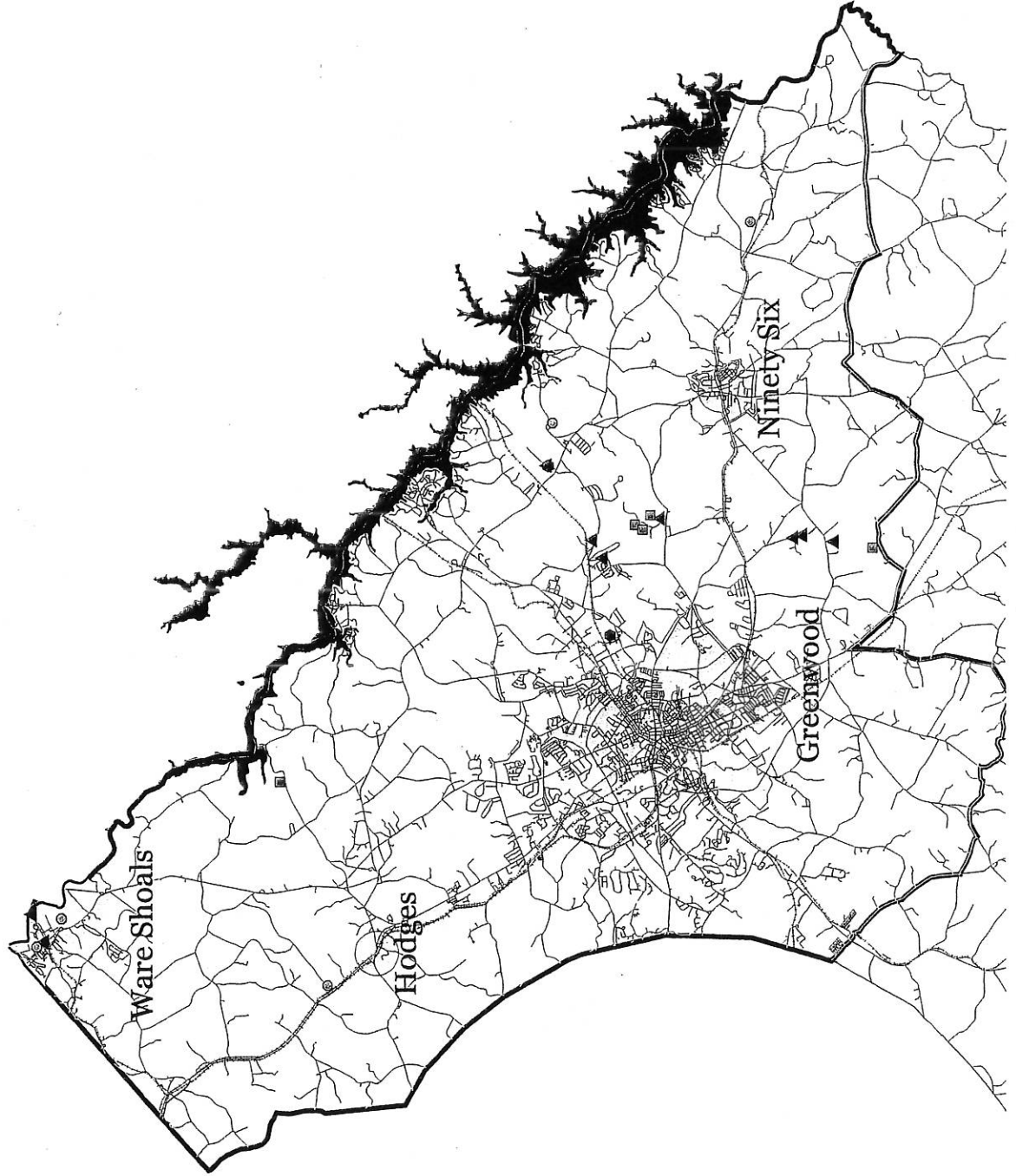
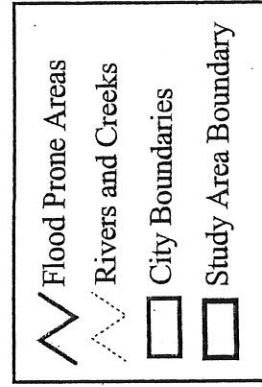
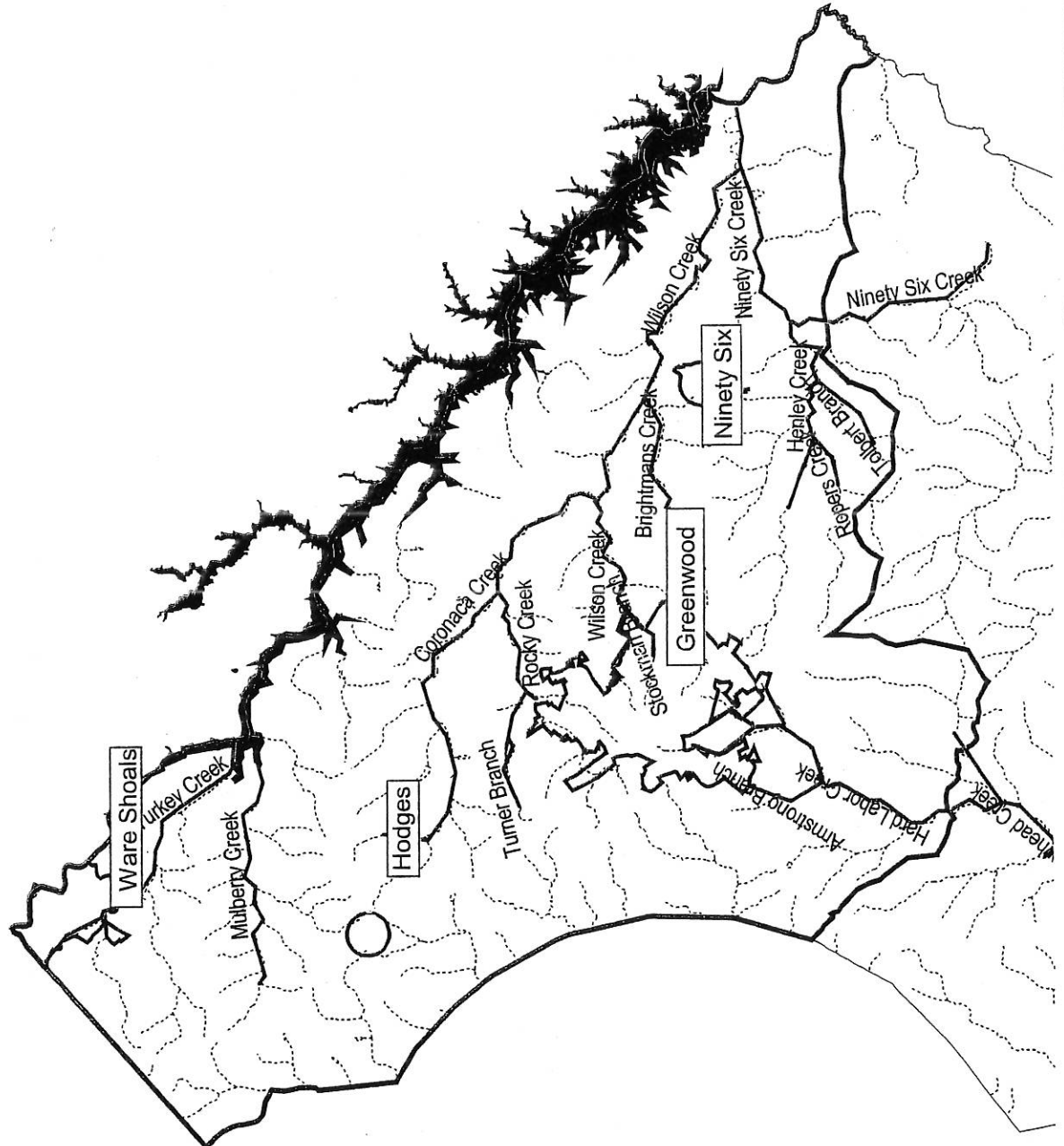


Figure 5.7
Greenwood Study Area
Flood Prone Areas

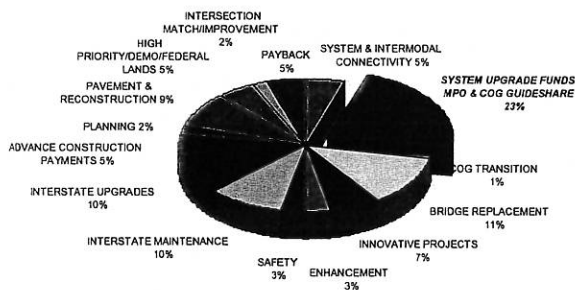


Produced by SCDOT Planning, May 2000
Data obtained from Federal Emergency Management Agency,
National Flood Insurance Program



Financing: Upper Savannah Council of Governments receives approximately \$6 million a year in federal transportation funds in the form of Rural Guideshares. Guideshares are allocated from the System Upgrade Program that provides funding for projects identified by the 10 Metropolitan Planning Organizations and the 10 Councils of Governments. The distribution of these funds is based on population.

Figure 6.1
Highway Construction Program
Federal and State Funds



In 1997, the Upper Savannah COG entered into a project acceleration program with the South Carolina Department of Transportation. The project acceleration program utilizes the annual guideshare allocation as a source of debt service for bonds that provide financing to construct projects that may otherwise be cost prohibitive or take many years to build. Over an eight-year period, \$74 million in projects will be completed. These four projects include US 25, Western Bypass, SC 72 in Abbeville, and SC 72, Parts 1 and 2 in Laurens County.

The project acceleration program is structured so that a portion of the guideshare allocation will be used for debt service through the year 2022. During the construction period, which extends to 2005, all of the guideshare is earmarked to the acceleration program. Beginning in 2006, approximately \$3.2 million will be available to the region to fund new projects.

To provide a 20-year funding estimate for Greenwood County, there are two possible scenarios. First, Greenwood would continue to compete for the rural guideshare available to the Upper Savannah COG. Using the existing funding allocation and accounting for debt service in the acceleration program, the Upper Savannah Region will receive approximately \$72 million in guideshare over the next 20 years.

If Greenwood becomes an MPO after the 2000 Census, the area would have a dedicated funding source to implement projects. The funding allocation would be calculated by applying Greenwood's share of the state's urban population to the total available guideshare. Since the 2000 population data is not available and guideshare funding is subject to change, it is difficult to estimate actual amount of funding Greenwood would receive as an MPO.

For comparison, assuming Greenwood would have the minimum of 50,000 in urban population to be designated as an MPO, the area would likely be the smallest MPO in terms of population in the state. Based on the funding formula, this suggests that Greenwood would be